

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

### Listing of Claims:

- 1        1. (Currently amended) An apparatus for supporting one or more servers  
2        on a single semiconductor chip, comprising:
  - 3            a plurality of first-level translation lookaside buffers on the single  
4            semiconductor chip, wherein each first-level translation lookaside buffer is  
5            associated with a processor core of a plurality of processor cores on the single  
6            semiconductor chip; and  
7            a second-level translation lookaside buffer that is coupled to the plurality  
8            of first-level translation lookaside buffers, wherein the second-level translation  
9            lookaside buffer stores a subset of the entries in the plurality of first-level  
10          translation lookaside buffers;  
11          wherein an access to a page table entry in main memory by a processor  
12          core associated with a first-level translation lookaside buffer can be stored in the  
13          second-level translation lookaside buffer before being forwarded to the first-level  
14          translation buffer associated with the processor that requested the page table entry;  
15          whereby storing the page table entry in the second-level translation  
16          lookaside buffer eliminates a need to refer to main memory to access the same  
17          page table entry if another processor requests the same page table entry.